IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TENNESSEE
WESTERN DIVISION

FERRON THOMPSON,	)	
	)	
Plaintiff,	)	
	)	
v.	)	CASE NO. 2:05-cv-2368
	)	
STATE FARM FIRE AND CASUALTY COMPANY,	)	
	)	
Defendant.	)	

ORDER DENYING PLAINTIFF'S MOTION TO EXCLUDE DEFENDANT'S OPINION WITNESS JAMES SWAIN FROM TESTIFYING AS AN EXPERT IN THE SCIENTIFIC FIELD OF FIRE CAUSE AND ORIGIN

Before the Court is Plaintiff Ferron Thompson's Motion to Exclude Defendant's Opinion Witness James Swain from Testifying as an Expert in the Scientific Field of Fire Cause and Origin (Motion to Exclude) pursuant to Federal Rules of Evidence 104(a) and 702. (D.E. # 142.) For the following reasons, the Court **DENIES** Plaintiff's Motion to Exclude.

I. BACKGROUND[1]

On the evening of April 4, 2004, a fire broke out in Plaintiff's residence. At the time of the fire, Plaintiff had a homeowner's policy, in full force and effect, with Defendant State Farm Fire and Casualty Company. On or about June 15, 2004, Plaintiff submitted a Sworn Proof of Loss for the damage to his residence and personal property resulting from the fire. After an investigation,

[1]For the purposes of this motion, the Court accepts these facts as true. The Court also incorporates, in part, the facts as set forth in the Court's September 17, 2007 Order Granting Defendant's Motion for Partial Summary Judgment.

Defendant ultimately denied Plaintiff's claim because it believed the fire was incendiary. Plaintiff commenced the present lawsuit on April 1, 2005 in the Circuit Court of Shelby County, Tennessee. Defendant subsequently removed the case to this Court on May 16, 2005. Plaintiff filed his Motion to Exclude on March 1, 2008. On March 22, 2008, Defendant filed its response. The Court conducted a hearing on the present motion on April 22, 2008. Plaintiff filed his reply on April 23, 2008.

II. LEGAL STANDARD

The Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc. "established guidelines for district courts to use in determining the admissibility of expert testimony pursuant to Rules 702 and 104 of the Federal Rules of Evidence. . . ." Pride v. BIC Corp., 218 F.3d 566, 577 (6th Cir. 2000). Daubert's general holding applies not only to "scientific" knowledge, but also to testimony based on "technical" and "otherwise specialized" knowledge. Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141 (1999). "Although . . . the evaluation of expert testimony is generally left to juries, the Court emphasized the trial judge's "gatekeeping" role with respect to expert proof . . . ." Pride, 218 F.3d at 577 (citing Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 597-98 (1993)). Rule 702 of the Federal Rules of Evidence governs the admissibility of expert testimony, and provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702.

A proposed expert witness "must first establish his expertise by reference to 'knowledge, skill, experience, training, or education.'" Pride, 218 F.3d at 577 (quoting Fed. R. Evid. 702). Next, a proffered expert witness must testify as to his or her "'scientific, technical or otherwise specialized knowledge.'" Id. (citing Fed. R. Evid. 702). The Daubert Court further explained, that "[i]n short, the requirement that an expert's testimony pertain to "scientific knowledge" establishes a standard of evidentiary reliability." 509 U.S. at 590. The district court's function as a gatekeeper, "is 'to determine whether the principles and methodology underlying the testimony itself are valid'- not to second guess the validity of conclusions generated by otherwise valid methods, principles, and reasoning." Pride, 218 F.3d at 577 (quoting United States v. Bonds, 12 F.3d 540, 556 (6th Cir. 1993)); see also Daubert, 509 U.S. at 595 (emphasizing that the focus of the inquiry "must be solely on principles and methodology, not on the conclusions that they generate."). "[T]he Daubert Court identified several factors that a district court should consider when evaluating the scientific validity of expert testimony, notably: the testability of the expert's hypotheses . . . , whether the expert's methodology has been subjected to peer review, the rate of error associated with the methodology, and whether the methodology is generally accepted within the scientific community." Id. (citing 509 U.S. at 593-94). However, this list is not exclusive and relevant reliability may also be established by personal knowledge and experience. Kumho Tire Co., 526 U.S. at 150-51. Finally, the testimony must assist the trier of fact. Pride, 218 F.3d at 578. Thus, the "testimony must "fit" the facts of the case, that is, there must be a connection between the scientific research or test being offered and the disputed factual issues in the case . . . ." Id. (citing Daubert, 509 U.S. at 592).

The inquiry pursuant to Rule 702 is "a flexible one." Daubert, 509 U.S. at 594; see also Kumho Tire Co., 526 U.S. at 152 ("[T]he trial judge must have considerable leeway in deciding in

a particular case how to go about determining whether particular expert testimony is reliable."). Likewise, a trial court's decision whether or not to admit expert testimony pursuant to Daubert is reviewed under an abuse of discretion standard. Gen. Elec. Co. v. Joiner, 522 U.S. 136, 143 (1997). "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof" are still available to the opposing party to attack "shaky but admissible evidence." Daubert, 509 U.S. at 596. The party proffering the expert testimony must demonstrate by a preponderance of proof that the potential expert witness meets requirements discussed above. Pride, 218 F.3d at 578 (citing Daubert, 509 at 592 n.10).

III. ANALYSIS

A. QUALIFICATIONS

First, the Court must determine whether James Swain (Swain) is sufficiently qualified by knowledge, skill, experience, training, or education to assist the trier of fact in this case. After reviewing Swain's biography, the Court finds that Swain has met the qualification requirements under Rule 702. At the time of the investigation, Swain had over twenty-five years experience as a professional investigator. (Swain Biography, Def.'s Resp. in Opp'n, Ex. A.) Swain is a Certified Fire Investigator through the International Association of Fire Investigators and a member of the International Association of Arson Investigators. (Id.) In addition, he holds Private Investigators Licenses in Tennessee and Arkansas. (Id.) Swain has been employed with his current employer, Unified Investigations & Sciences, Inc. (Unified), since 1995. (Id.) Prior to joining Unified, Swain worked as a Criminal Investigator for the Missouri State Fire Marshall's Office and as a Fire Investigator in the private sector, among other things. (Id.) Swain has personally investigated over 3,000 fires and explosions and has supervised approximately 300 investigations of fires involving

electrical and mechanical components. (Id.) He has also completed numerous training programs in fire investigation. (Id.) Moreover, Swain has been accepted as an expert in several state and federal courts. (Id.) Therefore, based upon Swain's extensive qualifications, the Court finds that Swain has sufficient knowledge, skill, experience, training, and education to meet the requirements pursuant to Rule 702.

B. PRINCIPLES AND METHODS

Turning to Plaintiff's primary contention, Plaintiff asserts that the principles and methods underlying Swain's investigation and testimony are unreliable because Swain failed to conduct his investigation in accordance with standards and protocols advanced in the National Fire Protection Association 921 Guide for Fire and Explosion Investigations (NFPA 921). Specifically, Plaintiff argues that in violation of the standards set forth in NFPA 921, Swain concluded that the fire at issue was of incendiary origin because: (1) it was a "hot fire," (2) it was a fast moving fire, (3) there was melted copper, and (4) there were irregular burn patterns. Further, Swain failed to obtain a "comparison sample" at the time that four other hardwood flooring samples were obtained. In contrast, Defendant asserts that in addition to utilizing NFPA 921 in part, Swain also relied on his twenty-five years of experience as a professional investigator.

NFPA 921 "is designed to assist individuals who are charged with the responsibility of investigating and analyzing fire and explosion incidents and rendering opinions as to the origin, cause, responsibility, or prevention of such incidents." (NFPA 921, ch. 1.1 (2001 ed.), Def.'s Resp. in Opp'n, Ex. C.) The purpose of NFPA 921 "is to establish guidelines and recommendations for the safe and systematic investigation or analysis of fire and explosion incidents . . . ." (Id. ch. 1.2.) Courts have recognized NFPA 921 as a "guide for assessing the reliability of expert testimony in

fire investigations." Indiana Ins. Co. v. Gen. Elec. Co., 326 F. Supp. 2d 844, 849 (N.D. Ohio 2004); see also Travelers Indem. Co. v. Ind. Paper & Packaging Corp., No. 3:02-cv-491, 2006 U.S. Dist. LEXIS 43851, at *12 (E.D. Tenn. June 27, 2006) (recognizing "that NFPA 921 is a peer reviewed and generally accepted standard in the fire investigation community.").

As a preliminary matter, the Court will first address Plaintiff's general contention that failure to follow NFPA 921 constitutes valid grounds for disqualification. Although Plaintiff is correct that courts have disqualified experts based, in part, on frequent and significant deviations from NFPA 921's methodologies, see Chester Valley Coach Works, Inc. v. Fisher-Price, Inc., No. CIV. A. 99 CV 4197, 2001 WL 1160012, at *8 (E.D. Pa. Aug. 29, 2001), Plaintiff mischaracterizes the policy and purpose behind NFPA 921. As stated above, the purpose of NFPA 921 "is to establish guidelines and recommendations . . . ." (NFPA 921, ch. 1.2 (2001 ed.), Def.'s Resp. in Opp'n, Ex. C.) "Deviations from these procedures, however, are not necessarily wrong or inferior but need to be justified." (Id.) Further, NFPA 921 states that:

> As every fire . . . is in some way different and unique from any other, this document is not designed to encompass all the necessary components of a complete investigation or analysis of any one case. Not every portion of this document may be applicable to every fire . . . . It is up to investigators . . . to apply the appropriate recommended procedures in this guide to a particular incident. In addition, it is recognized that time and resource limitations or existing policies may limit the degree to which the recommendations in this document will be applied . . . .

(Id.) Moreover, NFPA 921 defines "guide" as "[a] document that is advisory or informative in nature and that contains only nonmandatory provisions." (Id. ch. 1.3.69.) Swain's deposition testimony that NFPA 921 is to be utilized as a guide or reference comports with NFPA 921's own explanation and definition. (Swain Dep. at 18.) Although following NFPA 921 indicates the

reliability of an investigator's methods, any departure from the document's guidelines is not necessarily in and of itself grounds for automatic disqualification.

Turning now to Plaintiff's specific contentions, Plaintiff argues that in violation of the standards set forth in NFPA 921, Swain concluded that the fire at issue was of incendiary origin because: (1) it was a hot fire, (2) it was a fast moving fire, (3) there was melted copper, and (4) there were irregular burn patterns. Further, Swain failed to obtain a comparison sample at the time that four other hardwood flooring samples were obtained.

1. TEMPERATURE AND RATE OF GROWTH

First, the Court will address Plaintiff's allegations that Swain violated NFPA 921 by concluding that a hot fire and a fast moving fire constitutes evidence of arson. (See, e.g., Swain Dep. 295-96; Swain Report, Def.'s Resp. in Opp'n, Ex. A.) Plaintiff posits that because "[w]ood and gasoline burn at essentially the same flame temperature," (NFPA 921, ch. 6.8.2.2 (2004 ed.), Pl.'s Mot. to Exclude, Ex. L.), this refutes any argument that an incendiary fire burns hotter than one that is not incendiary. As to the rate of fire growth, Plaintiff argues that "[t]he rate of fire growth as determined by witness statements is highly subjective . . . . [and] is not reliable or supported *independent evidence* of an incendiary fire." (Id. ch. 5.4.1.2. (emphasis added).) Contrary to this provision, Plaintiff alleges that Swain improperly relied and placed undue weight on firefighters' accounts of the fire's speed. (Swain Dep. 165-69.)

Although Plaintiff's citations to NFPA 921 are correct, the document does not preclude an investigator from considering a fire's temperature and rate of growth during an investigation. First, the Court will address Plaintiff's argument regarding Swain's consideration of fire temperature during his investigation. Even presuming wood and gasoline burn at approximately the same

temperature, this fact alone does not preclude an investigator from considering fire temperature during his or her investigation. The relation between this provision and a prohibition on the consideration of fire temperature is too attenuated. Moreover, NFPA 921 provides guidelines for determining fire temperature. (NFPA 921, ch. 6.8.2 (2004 ed.), Pl.'s Mot. to Exclude, Ex. L .) For instance, an "investigator can use the analysis of the melting and fusion of materials to assist in establishing whether higher than expected heat energy was present." (Id. ch. 6.8.2.4.) Therefore, NFPA 921 permits an investigator to use fire temperature as a factor in making his or her determination.

Next, the Court will consider Swain's consideration of fire growth. In addition to the provision cited by Plaintiff above, NFPA 921 provides:

> Investigators may form an opinion that the speed of fire growth or the extent of damage was greater than would be expected for the "normal" fuels believed to be present . . . . However these opinions are subjective. Fire growth and damage are related to a large number of variables, and the assumptions made by the investigator are based on that investigator's individual training and experience. If subjective language is used, the investigator should be able to explain specifically why the fire was "excessive," "unnatural," or "abnormal."

(NFPA 921, ch. 19.2.8 (2001 ed.), Def.'s Resp. in Opp'n, Ex. C.) After reviewing Swain's report and deposition testimony, it appears that he followed the guidelines set forth in NFPA 921 by explaining why he believed the fire was "abnormal." For instance, "[i]n twenty five minutes or less the fire had extended horizontally across the back of the house, out windows and through the roof of the two-story house. It compromised gypsum board wall and ceiling coverings commonly given a thirty-minute fire retardant rating." (Swain Report, Def.'s Resp. in Opp'n, Ex. A at 18.) In response to a question as to how the fire could have traveled to the second floor of Plaintiff's home, Swain stated that nothing indicated to him that the fire "communicated through some hidden recess

or some hole or abnormality . . . that would explain how it burned on two levels at the same time." (Swain Dep. 120.) Swain also noted that Plaintiff's home lacked what would be considered the common fuel load consisting of furnishings or other contents. (Swain Report, Def.'s Resp. in Opp'n, Ex. A at 18.) Furthermore, even though Swain did consider the rate of growth in reaching his conclusion, it was not the only factor he considered. For example, he also looked at the direction of fire travel and the level of destruction. (Id. at 1.) Therefore, Swain has offered substantial explanation as to why he concluded that the fire was abnormal.

Finally, Plaintiff posits that John Lentini (Lentini), a cause and origin expert retained by Defendant for a chemistry issue, has published a book opining that "fire temperature and the perceived speed of the fire are not valid indicators of a fire's cause." (John L. Lentini, Scientific Protocols for Fire Investigation 465 (2006), Pl.'s Mot. to Exclude, Ex. G.) The Court finds this argument unpersuasive. Rule 702 "is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise." Fed. R. Evid. 702 advisory committee's note (citing Heller v. Shaw Indus., Inc., 167 F.3d 146, 160 (3d Cir. 1999)). Furthermore, Lentini did not perform a cause and origin investigation of the fire at issue or review Swain's investigation or determination. Because Swain considered the fire's temperature and rate of growth in accordance with the guidelines set forth in NFPA 921, the Court declines to disqualify him on these grounds.

2. MELTED COPPER

Second, the Court will consider Plaintiff's argument that pursuant to NFPA 921, melted copper cannot be considered evidence of arson. NFPA 921 provides, "[t]he melting of certain metals *may not always* be caused by fire temperatures higher than the metals' melting point. It may

be caused by alloying." (NFPA 921, ch. 6.8.3 (2004 ed.), Pl.'s Mot. to Exclude, Ex. L (emphasis added).) As stated above, although Plaintiff is correct in his citation of NFPA 921, the document does not prohibit an investigator from considering the presence of melted copper during his or her investigation. During his deposition Swain testified that it was unusual that the copper electrical conductors were "vaporized from the heat of the fire . . . . Over such a broad area . . . ." (Swain Dep. 275.) Further, he had previously observed "copper melt in unaccelerated fires," but with the typical fuel load present. (Id. at 276.) Daubert and its progeny permit courts to consider an expert's experience in conjunction with the other Daubert factors. Hence, based on his extensive experience, Swain found the situation at Plaintiff's residence unusual. Moreover, Swain considered the melted copper as only one of many factors in reaching his conclusion. Therefore, the Court declines to disqualify Swain based on his consideration of melted copper.

3. IRREGULAR BURN PATTERNS

Third, Plaintiff contends that Swain improperly considered irregular burn patterns in rooms of full involvement.[2] NFPA 921 provides, "[i]rregular . . . patterns on floors . . . should not be identified as resulting from ignitable liquids on the basis of observation of the shape *alone*. In cases of full room involvement, patterns similar in appearance to ignitable liquid burn patterns can be produced with no ignitable liquid present." (NFPA 921, ch. 6.17.8.2 (2004 ed.), Pl.'s Mot. to Exclude, Ex. L (emphasis added).) In the area where Swain found irregular burn patterns, there was

[2]It is unclear whether or not Plaintiff contends that Swain also improperly considered the possibility that the fire may have had multiple points of origin. (Pl.'s Mot. to Exclude 3.) However, NFPA 921 directs "[t]he investigator . . . to uncover any additional fire sets or points of origin that may exist." (NFPA 921, ch. 19.2.1 (2001 ed.), Def.'s Resp. in Opp'n, Ex. C.) Moreover, "confirmation of multiple fires is a compelling indication that the fire was incendiary." (Id.) Therefore, the Court declines to exclude Swain on this basis.

full-room involvement and the second floor had collapsed into the first floor. (Swain Dep. 139-40.) Similar to the discussion above, NFPA 921 does not prohibit an investigator from considering irregular burn patterns, even in rooms of full involvement; the document only cautions an investigator from considering burn patterns alone. As discussed above, Swain considered additional factors in reaching his conclusion that the fire was incendiary. Therefore, the Court will not disqualify Swain based on his consideration of the irregular burn patterns observed in rooms of full involvement.

4. LACK OF A COMPARISON SAMPLE

Fourth, Plaintiff asserts that Swain also violated NFPA 921 by failing to obtain a comparison sample. NFPA 921 states:

> When physical evidence is collected for examination and testing, it is often necessary to also collect comparison samples . . . . The collection of comparison samples is especially important in the collection of materials that are believed to contain liquid or solid accelerant . . . . When collected for the purpose of identifying the presence of an accelerant residue, *the comparison sample should be collected from an area that the investigator believes is free from such accelerants . . . or in areas that have not been involved in the fire* . . . . It is recognized that comparison samples may be unavailable due to the condition of the fire scene. It is also recognized that comparison samples are frequently unnecessary for the valid identification of ignitable liquid residue. The determination of whether comparison samples are necessary is made by the laboratory analyst, but because it is usually impossible for an investigator to return to a scene to collect comparison samples, they should be collected at the time of the initial investigation.

(NFPA 921, chs. 16.5.4.6-16.5.4.6.3 (2004 ed.), Pl.'s Mot. to Exclude, Ex. L (emphasis added).) During his investigation, Swain obtained four samples of hardwood floor from Plaintiff's home in order to determine the presence of any ignitable liquids. (Swain Report, Laboratory Report, Def.'s Resp. in Opp'n, Ex. A.) Three samples contained a mineral spirits-type product and one sample from the southeast corner of the den failed to reveal the presence of an ignitable liquid. (Id.)

Although nothing prevented Swain from obtaining a comparison sample from an area of the house that was not damaged by the fire, he "saw no reason to take a comparison sample." (Swain Dep. 125-26.) Plaintiff posits that Swain returned to the home in June 2007 in order to obtain a comparison sample from an area undamaged by the fire. (Pl.'s Mot. to Exclude 15.)

Comparison samples collected pursuant to NFPA 921 fall into two categories: those "collected from an area that the investigator believes is free of . . . accelerants . . . or in areas that have not been involved in the fire." (NFPA 921, ch. 16.5.4.6.2 (2004 ed.), Pl.'s Mot. to Exclude, Ex. L.) Even though Swain failed to collect a comparison sample from an area undamaged by the fire until June 2007, he did obtain a comparison sample that tested negative for ignitable liquids. Hence, that negative sample could serve as an effective comparison sample for the three samples that tested positive for ignitable liquids. Thus, the Court will not disqualify Swain for his failure to obtain a comparison sample from an area of the home undamaged by fire. While the Court will not disqualify Swain, the Court notes that failure to take a timely comparison sample is a weakness which may be fully exploited by Plaintiff on cross-examination.

C. ASSISTANCE TO THE TRIER OF FACT

Finally, the Court will determine whether Swain's testimony will assist the trier of fact. In this case, the only issue before the jury is whether or not Plaintiff burned or procured the burning of his home. Swain's testimony concerning his investigation and determination of the cause and origin of the fire will assist the jury in making this determination. Because there is a connection between the testimony being offered and the issue in this case, the Court finds that Swain's testimony will assist the trier of fact.

IV. CONCLUSION

After reviewing the record as a whole, the Court finds that Swain, based on his reliance on NFPA 921 and his extensive experience, has met the qualification requirements pursuant to Federal Rule of Evidence 702. It appears that Plaintiff's arguments go towards the weight of the evidence rather than its admissibility. As discussed above, Plaintiff is free to conduct a "[v]igorous cross-examination" and/or present evidence to the contrary. Daubert, 509 U.S. at 596.

For the foregoing reasons, the Court **DENIES** Plaintiff's Motion to Exclude.

IT IS SO ORDERED this 1st day of May, 2008.

s/Bernice Bouie Donald
BERNICE BOUIE DONALD
UNITED STATES DISTRICT COURT JUDGE